

Chapter 7 quiz, November 18, 2011. Not to be graded. 10 minutes.

Q1. Suppose X_1, \dots, X_{10} are a random sample from $N(10, 20)$. Let \bar{X} be the sample mean and S^2 be the sample variance. What is the distribution of $\frac{\bar{X}-10}{S/\sqrt{10}}$?

Q2. Of the two t distributions with 8 and 20 degrees of freedom, respectively, which one is “closer” to $N(0, 1)$?

Q3. Use table A.5 to find the critical value $t_{0.05,9}$.

Q4. Use table A.8 to find the critical value $t_{0.02,9}$.